

Supplementary Information

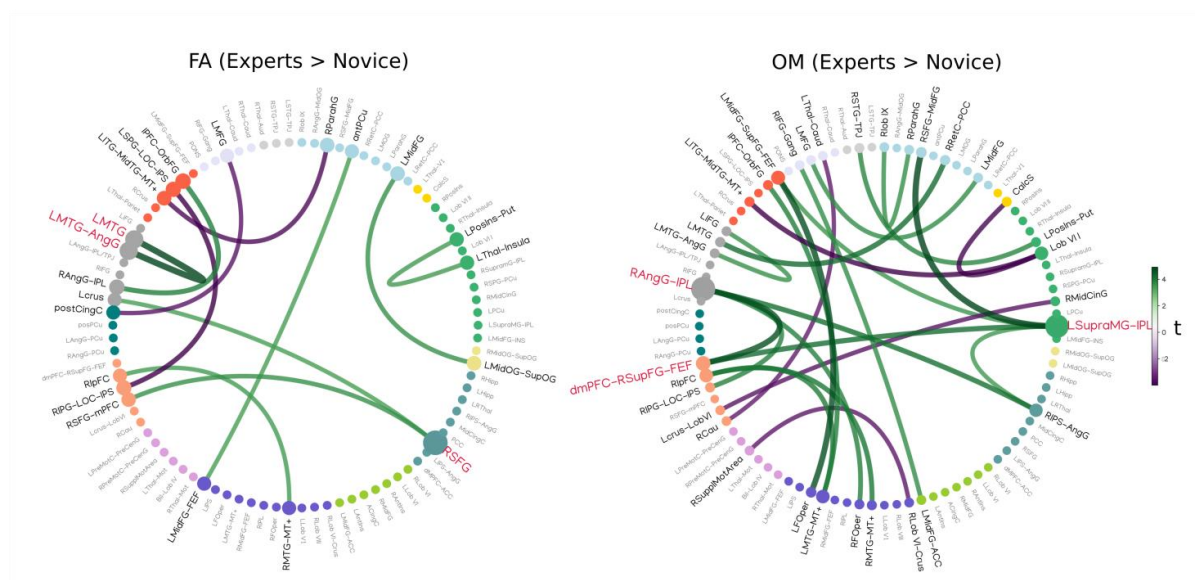


Figure S1: *Differential connectivities between meditators and control group.* Figure shows the connectivities that are statistically different in experts > controls (two-sided t-test; $p < 0.01$ FDR corrected), in FA (left panel) and OM (right panel).

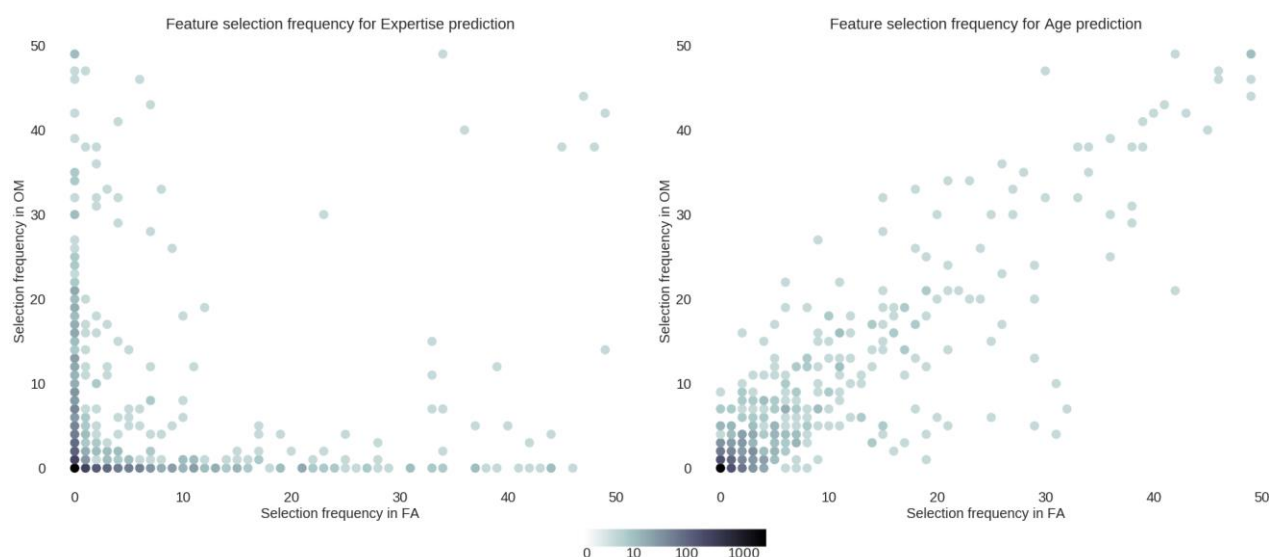


Figure S2: Feature selection frequency for expertise and age prediction in control analysis. Figure shows feature selection frequency for meditation expertise prediction (panel a) and age prediction (panel b), for focused attention (x-axis) and open monitoring meditation styles (y-axis). The maximum frequency value is equal to the number of cross-validation folds. The color of the dots indicates the number of features with that particular selection frequency.

Table S1: List of selected ROIs. Coordinates (x,y,z) of ROIs used for functional connectivity analysis, according to MNI atlas.

Coordinates			Regions	Labels	Network	Voxels
-56	-14	7	Left Superior Temporal/ Heschl's Gyrus	LSTG-TPJ	Auditory	962
56	-7	6	Right Superior Temporal Gyrus	RSTG-TPJ	Auditory	554
13	-16	-2	Right Thalamus	RThal-Aud	Auditory	26
14	-2	8	Right Thalamus. Caudate	RThal-Caud	Basal Ganglia	669
-14	-3	7	Left Thalamus. Caudate.	LThal-Caud	Basal Ganglia	828
-44	22	23	Left Inferior Frontal Gyrus	LMFG	Basal Ganglia	18
48	28	17	Right Inferior Frontal Gyrus	RIFG-Gang	Basal Ganglia	63
-6	-26	-38	Pons	PONS	Basal Ganglia	32
-30	23	49	Left Middle Frontal eye Fields.	LMidFG-SupFG-FEF	LECN	1501
-40	48	-1	Left Inferior / Orbito Frontal Gyrus	IPFC-OrbFG	LECN	437
-42	-63	46	Left Superior / Inferior Parietal Sulcus.	LSPG-LOC-IPS	LECN	2110
-59	-42	-12	Left Inferior / Middle Temporal Gyrus	LITG-MidTG-MT+	LECN	350
36	-69	-43	Right Crus I	RCrus	LECN	310
-14	-28	2	Left Thalamus	LThal-Pariet	LECN	8
-49	25	-4	Inferior Frontal Gyrus	LIFG	Language	652
-52	-1	-22	Left Middle Temporal Gyrus	LMTG	Language	27
-52	-31	-6	Left Middle Temporal Gyrus. Angular Gyrus	LMTG-AngG	Language	317
-54	-55	22	Left Angular Gyrus. Inferior Parietal Lobule.	LAngG-IPL/TPJ	Language	1420
49	28	-10	Right Inferior Frontal Gyrus	RIFG	Language	58
55	-43	10	Right Angular Gyrus. Inferior Parietal Lobule.	RAngG-IPL	Language	1106
-22	-80	-35	Left Crus I	LCrus	Language	270
2	-28	27	Midcingulate / Posterior Cingulate Cortex	postCingC	Precuneus	579
3	-72	40	Posterior Precuneus	posPCu	Precuneus	1572
-36	-62	46	Left Angular Gyrus	LAngG-PCu	Precuneus	388
39	-62	45	Right Angular Gyrus	RAngG-PCu	Precuneus	96
38	26	42	Dorsomedial Prefrontal Cortex.	dmPFC-RSupFG-FEF	RECN	2093
38	54	1	Right Left Posterior Frontal Cortex	RlpFC	RECN	356
48	-54	47	Right Inferior Parietal Gyrus. Intraparietal Sulcus	RIPG-LOC-IPS	RECN	1873
5	37	46	Right Superior Frontal Gyrus	RSFG-mPFC	RECN	83
-30	-73	-39	Left Crus I. Crus II. Lobule VI	Lcrus-LobVI	RECN	2403
13	2	14	Right Caudate	Rcau	RECN	188
-33	-21	60	Left Precentral / Postcentral Gyrus	LPreMotC-PreCenG	Sensorimotor	1365
38	-18	57	Right Precentral / Postcentral Gyrus	RPreMotC-PreCenG	Sensorimotor	1446
3	-13	61	Right Supplementary Motor Area	RSupplMotArea	Sensorimotor	159
-12	-19	-1	Left Thalamus	LThal-Mot	Sensorimotor	19
-2	-52	-19	Bilateral Lobule IV	Bil-Lob IV	Sensorimotor	2015
12	-20	-4	Right Thalamus	RThal-Mot	Sensorimotor	20
-27	-1	54	Left Middle Frontal Gyrus. Frontal Eye Fields	LMidFG-FEF	Visuospatial	338
-36	-46	47	Left Intraparietal Sulcus	LIPS	Visuospatial	2020
-47	13	27	Left Frontal Operculum. Inferior Frontal Gyrus	LFOper	Visuospatial	1105
-49	-65	-6	Left Middle Temporal Gyrus	LMTG-MT+	Visuospatial	93
28	2	54	Right Middle Frontal Gyrus	RMidFG-FEF	Visuospatial	97
37	-47	48	Right Inferior Parietal Lobule	RIPL	Visuospatial	1193
49	12	28	Right Frontal Operculum.	RFOper	Visuospatial	326
50	-59	-11	Right Middle Temporal Gyrus	RMTG-MT+	Visuospatial	76
-27	-72	-52	Left Lobule V111.	LLob V1-FEF	Visuospatial	38
24	-73	-51	Right Lobule VIII.	RLob VIII	Visuospatial	131
34	-70	-26	Right Lobule VI. Crus I	RLob VI-Crus	Visuospatial	62

-31	47	22	Left Middle Frontal Gyrus	LMidFG-ACC	anterior Salience	651
-42	14	-3	Left Anterior Insula	LAntIns	anterior Salience	305
0	17	47	Anterior Cingulate Cortex.	ACingC	anterior Salience	2887
28	46	26	Right Middle Frontal Gyrus	RMidFG	anterior Salience	470
43	15	-1	Right Anterior Insula	RAntIns	anterior Salience	319
-34	-56	-32	Left Lobule VI. Crus I	LLob VI-Insula	anterior Salience	95
36	-58	-32	Right Lobule VI. Crus I	RLob VI	anterior Salience	139
-3	49	14	Medial Prefrontal / Anterior Cingulate Cortex.	dMPFC-ACC	dorsal DMN	5257
-48	-68	35	Left Intraparietal Sulcus. Angular Gyrus	LIPS-AngG	dorsal DMN	97
19	38	47	Right Superior Frontal Gyrus	RSFG	dorsal DMN	137
1	-53	28	Posterior Cingulate Cortex. Precuneus	PCC	dorsal DMN	1555
2	-15	36	Midcingulate Cortex	MidCingC	dorsal DMN	114
50	-64	32	Right Intraparietal Sulcus. Angular Gyrus	RIPS-AngG	dorsal DMN	38
-1	-8	4	Left and Right Thalamus	LRThal	dorsal DMN	220
-24	-29	-13	Left Hippocampus	LHipp	dorsal DMN	393
27	-23	-17	Right Hippocampus	RHipp	dorsal DMN	142
-29	-87	-1	Left Middle / Superior Occipital Gyrus	LMidOG-SupOG	high Visual	868
32	-85	0	Right Middle /Superior Occipital Gyrus	RMidOG-SupOG	high Visual	1679
-39	35	30	Left Middle Frontal Gyrus	LMidFG-INS	posterior Salience	93
-57	-38	37	Left Supramarginal/ Inferior Parietal Gyrus	LSupramG-IPL	posterior Salience	1205
-8	-52	61	Left Precuneus	LPCu	posterior Salience	98
12	-28	45	Right Midcingulate Cortex	RMidCinG	posterior Salience	56
21	-48	69	Right Superior Parietal Gyrus. Precuneus	RSPG-PCu	posterior Salience	133
59	-32	36	Right Supramarginal/ Inferior Parietal Gyrus	RSupramG-IPL	posterior Salience	1002
-12	-21	5	Left Thalamus	LThal-Insula	posterior Salience	142
-33	-41	-37	Lobule VI I	Lob VI I	posterior Salience	102
-37	-13	-5	Left Posterior Insula. Putamen	LPosIns-Put	posterior Salience	114
13	-14	9	Right Thalamus	RThal-Insula	posterior Salience	63
36	-43	-40	Lobule VI II	Lob VI II	posterior Salience	13
40	-6	-9	Right Posterior Insula	RPosIns	posterior Salience	134
0	-74	11	Calcarine Sulcus	CalcS	primary Visual	1116
-18	-24	-4	Left Thalamus	LThal-V1	primary Visual	4
-12	-58	15	Left Retrosplenial and Posterior Cingulate Cortex	LRetC-PCC	ventral DMN	462
-24	12	55	Left Middle Frontal Gyrus	LMidFG	ventral DMN	405
-28	-37	-15	Left Parahippocampal Gyrus	LParahG	ventral DMN	134
-36	-81	32	Left Middle Occipital Gyrus	LMOG	ventral DMN	491
13	-53	14	Right Retrosplenial and Posterior Cingulate Cortex	RRetC-PCC	ventral DMN	590
1	-57	54	Anterior Precuneus	antPCu	ventral DMN	1921
26	26	45	Right Superior / Middle Frontal Gyrus	RSFG-MidFG	ventral DMN	399
28	-33	-19	Right Parahippocampal Gyrus	RParahG	ventral DMN	90
43	-74	32	Right Angular /Middle Occipital Gyrus	RAngG-MidOG	ventral DMN	752
15	-46	-53	Right Lobule IX	Rlob IX	ventral DMN	81